

P O Box 1980, Hobbs, NM

District II

P O. Drawer DD, Artesia, NM 88211

District III

1000 Rio Brazos Rd. Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

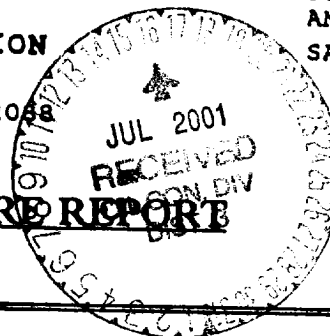
OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2068

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT



Sept
produced
water
2 pits
OK

Operator: Nordlic Company Inc NMOCB Telephone: 505-334-6178

Address: 1000 Rio BRAZOS AZTEC, NM 87410

Facility Or: MARCELINA Well No. 1
Well Name

Location: Unit or Qtr/Qtr Sec A Sec 24 T 16N R 10W County McKibben

Pit Type: Separator X Dehydrator Other

Land Type: BLM ~~X~~, State , Fee ~~BLM~~, Other

Pit Location: Pit dimensions: length 12, width 12, depth 4'
(Attach diagram)

Reference: wellhead X , other

Footage from reference: 60

Direction from reference: 10^a Degrees East North X
 X West South
of

Depth To Ground Water:

(Vertical distance from
contaminants to seasonal
high water elevation of
ground water)

Less than 50 feet (20 points)

50 feet to 99 feet (10 points)

Greater than 100 feet (0 Points) 0

Wellhead Protection Area:

(Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)

Yes (20 points)

No (0 points) 0

Distance To Surface Water:

(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)

Less than 200 feet (20 points)

200 feet to 1000 feet (10 points)

Greater than 1000 feet (0 points) e

RANKING SCORE (TOTAL POINTS):

Date Remediation Started: 01-15-01 Dated Completed: 01-15-01

Remediation Method: Excavation X Approx. cubic yards 40 cy.
(Check all appropriate sections) Landfarmed X Insitu Bioremediation
Other

Remediation Location: Onsite X Offsite _____
(ie. landfarmed onsite,
name and location of
offsite facility) _____

General Description Of Remedial Action: EXCAVATED Approximately 40 cy of
oily soil. Excavation 12' x 12' to Bedrock @ $\pm$ 11' Below Natural Grade.
LANDFARM Contaminated soil on-site. Remove production equipment,
Appurtenances, and debris. Grade & Backfill using soil obtained
on location

Ground Water Encountered: No X Yes Depth

Final Pit: Sample location Bottom @ four Sidewalls and Center
 Closure Sampling: _____
 (if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 11'
 Sample date 03-09-01 Sample time 13:05
 Sample Results _____

Benzene(ppm) ND
Total BTEX(ppm) 2.170 ppm
Field headspace(ppm) N/A
TPH 859 ppm

Ground Water Sample: Yes ☐ No ☒ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE _____

SIGNATURE

PRINTED NAME
AND TITLE

CLIENT: A Plus NMCD
Dardline

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

PIT NO: _____

C.O.C. NO: 8545

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 99042-002

PAGE No: _____ of _____

LOCATION: NAME: Marcelina WELL #: 1 PIT: Separator

DATE STARTED: 01-15-01

QUAD/UNIT: A SEC: 24 TWP: 16N RNG: 10W BM: _____ CNTY: H&K ST. NM

DATE FINISHED: 06-27-01

QTR/FOOTAGE: _____

CONTRACTOR: Envirotech

ENVIRONMENTAL
SPECIALIST: _____

SOIL REMEDIATION: EXCAVATION APPROX. 12 FT. x 12 FT. x 11 FT. DEEP.

DISPOSAL FACILITY: on-site Landfarm CUBIC YARDAGE: 40

LAND USE: RANGE LEASE: FEE

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 60' FEET NNW FROM WELLHEAD.

DEPTH TO GROUNDWATER: 7100 NEAREST WATER SOURCE: 71000 NEAREST SURFACE WATER: 71000

NMCD RANKING SCORE: 0 NMCD TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION: Heavy oil & parafin visible on surface
Blue gray soil 5-11' Below grade to Bedrock (SHALE).
Strong Hydrocarbon Odor.

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

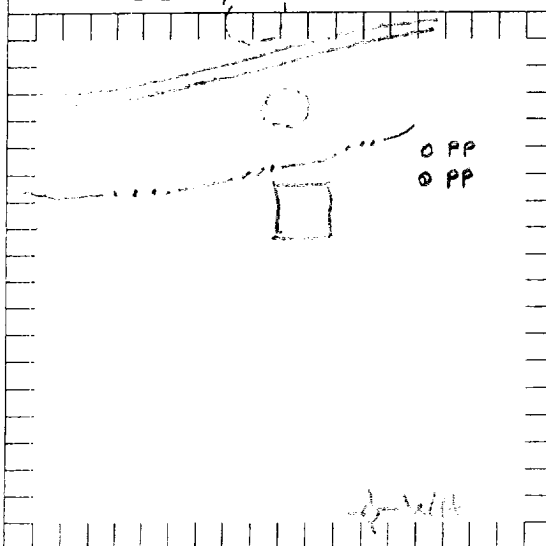
SCALE



0

FEET

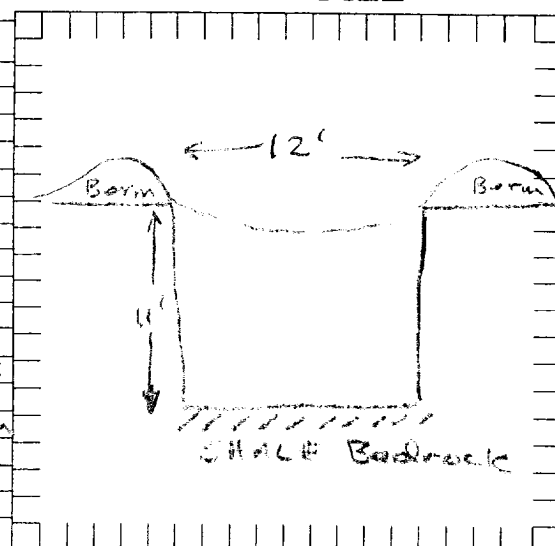
PIT PERIMETER



OVM
RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1	
2	
3	
4	
5	
20127	LAB SAMPLES
2015	859 ppm
2021	2.170 ppm

PIT PROFILE



TRAVEL NOTES:

CALLOUT: _____ ONSITE: _____

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

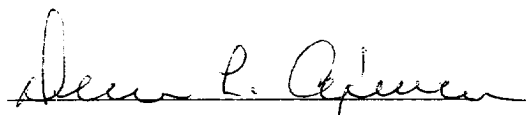
Client:	A Plus / NMOCD	Project #:	99042-002
Sample ID:	Marcelina #4	Date Reported:	03-13-01
Laboratory Number:	19369	Date Sampled:	03-09-01
Chain of Custody No:	8545	Date Received:	03-09-01
Sample Matrix:	Soil	Date Extracted:	03-12-01
Preservative:	Cool	Date Analyzed:	03-13-01
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

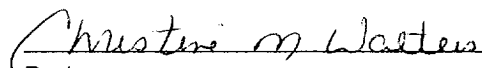
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	127	0.2
Diesel Range (C10 - C28)	732	0.1
Total Petroleum Hydrocarbons	859	0.1

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Nerdlihc Separator Pit @ 11' (Bedrock).


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	A Plus / NMOCD	Project #:	99042-002
Sample ID:	Marcelina #4	Date Reported:	03-12-01
Laboratory Number:	19369	Date Sampled:	03-09-01
Chain of Custody:	8545	Date Received:	03-09-01
Sample Matrix:	Soil	Date Analyzed:	03-12-01
Preservative:	Cool	Date Extracted:	03-12-01
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	260	1.7
Ethylbenzene	302	1.5
p,m-Xylene	680	2.2
o-Xylene	930	1.0
Total BTEX	2,170 <i>ppb</i>	

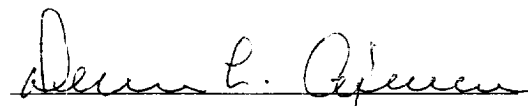
ND - Parameter not detected at the stated detection limit.

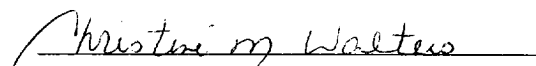
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	100 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Nerdlihc Separator Pit @ 11' (Bedrock).


Analyst


Review

08545

[illegible]

A Plus NMOC
Hard line

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

PIT No: _____
C.O.C # 9265

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: _____
PAGE No: _____ of _____

FACILITY LOCATION: Mareline Well No 1 "A" Sec 24, T16N R10W
SOURCE LOCATION: Former Separator Pit
SOURCE LOCATION: _____
SOURCE LOCATION: _____
FACILITY CLASSIFICATION: On-site Landfarm PIT TYPE: Separator

DATE STARTED: 01-15-01
DATE FINISHED: 06-27-01

ENVIRONMENTAL
SPECIALIST: HMB

SOIL REMEDIATION: QUANTITY: 40 # OF COMP. SAMPLES: 1
DIMENSIONS: 66 X 90
VISIBLE OBSERVATIONS: Dry Rocky soil, few minor oil spots
SAMPLING PLAN: collect 5 pt. Composite

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 20 YARDS NNW FROM WELLHEAD.

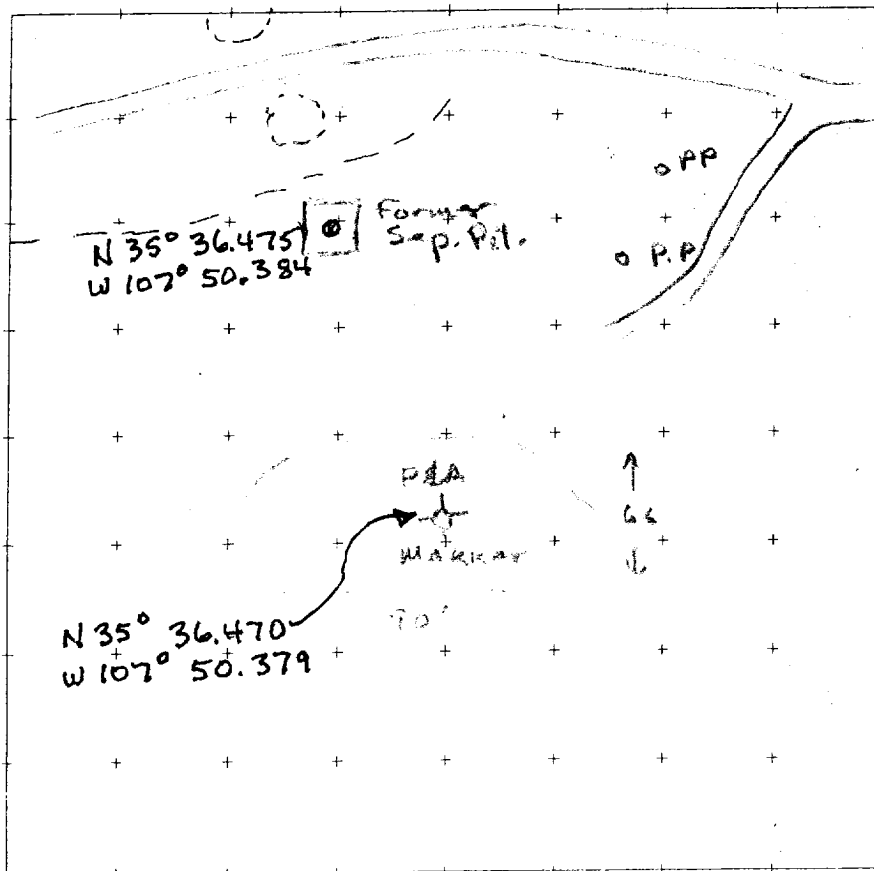
DEPTH TO GROUNDWATER: >100
NEAREST WATER SOURCE/TYPE: >1000
NEAREST SURFACE WATER: >1000
MAX TPH PER NMOC: 5000 ppm

No. OF 5-POINT
COMPOSITE SAMPLES:
YARDAGE--#
0-200=1
201-400=2
401-1000=3
>1000=5

Collected one 5 pt. composite Sample
From Landfarm.

FACILITY DIAGRAM

GRID SCALE:

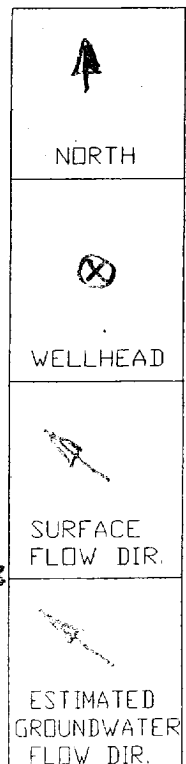


OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED:	RESULTS PPM:
20121		
	8015	756
	2021	0.033



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

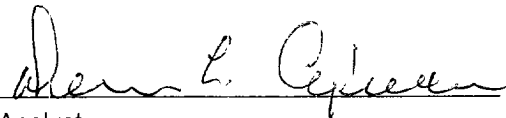
Client:	A Plus Well Service	Project #:	99042-002
Sample ID:	Marcellina #1	Date Reported:	06-27-01
Laboratory Number:	20127	Date Sampled:	06-22-01
Chain of Custody No:	9265	Date Received:	06-22-01
Sample Matrix:	Soil	Date Extracted:	06-25-01
Preservative:	Cool	Date Analyzed:	06-27-01
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

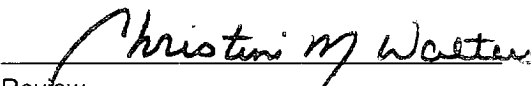
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	5.8	0.2
Diesel Range (C10 - C28)	980	0.1
Total Petroleum Hydrocarbons	986	0.1

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Nerdlihc on-site Landfarm 5 Pt. Composite.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	A Plus Well Service	Project #:	99042-002
Sample ID:	Marcellina #1	Date Reported:	06-27-01
Laboratory Number:	20127	Date Sampled:	06-22-01
Chain of Custody:	9265	Date Received:	06-22-01
Sample Matrix:	Soil	Date Analyzed:	06-27-01
Preservative:	Cool	Date Extracted:	06-25-01
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	3.5
Toluene	ND	3.3
Ethylbenzene	24.2	3.0
p,m-Xylene	ND	4.3
o-Xylene	9.2	2.1
Total BTEX	33.4	

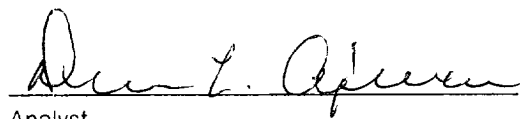
ND - Parameter not detected at the stated detection limit.

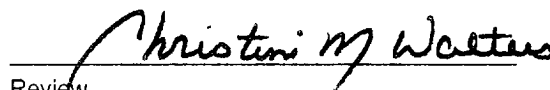
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	94 %
	1,4-difluorobenzene	94 %
	Bromochlorobenzene	94 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Nerdlihc on-site Landfarm 5 Pt. Composite.


Analyst


Review

CHAIN OF CUSTODY RECORD

09265

Client / Project Name		Project Location		ANALYSIS / PARAMETERS									
A Plus Well Service		NEROLITE											
Sampler: HARLAN M. BROWN		Client No. 99042-002		No. of Containers		8015		8021		8021		Remarks	
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix									
Bullseye #15	6-22-01	11:35	20126	Soil									ON-SITE Landform
Marcellina #1	6-22-01	11:45	20127	Soil									ON-SITE LANDFORM
Bullseye Tank Bet	6-22-01	12:00	20128	Soil									ON-SITE LANDFORM
Bullseye #7	6-22-01	12:23	20129	Soil									LANDFORM FOR TANK BATTERY SOIL
Bullseye 14	6-22-01	12:35	20130	Soil									ON-SITE LANDFORM
Bullseye #3	6-22-01	12:52	20131	Soil									ON-SITE LANDFORM INCLUDES PLAT 1 ON #2
Bullseye #12	6-22-01	13:04	20132	Soil									ON-SITE Landform
Bullseye #16	6-22-01	13:18	20133	Soil									ON-SITE LANDFORM
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time			
Harlan M. Brown		6-22-01		17:00		Harlan M. Brown		6/22/01		17:00			
Relinquished by: (Signature)						Received by: (Signature)							
Relinquished by: (Signature)						Received by: (Signature)							
ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615													Sample Receipt Y N N/A Received Intact ☒ Cool - Ice/Blue Ice ☒

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

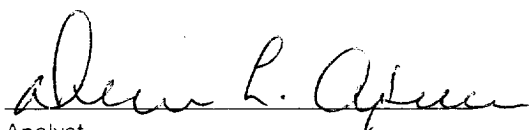
Client:	A Plus Well Service - NMOCD	Project #:	99042-002
Sample ID:	Marcelina No 1	Date Reported:	01-17-01
Laboratory Number:	19089	Date Sampled:	01-15-01
Chain of Custody No:	8459	Date Received:	01-15-01
Sample Matrix:	Soil	Date Extracted:	01-17-01
Preservative:	Cool	Date Analyzed:	01-17-01
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

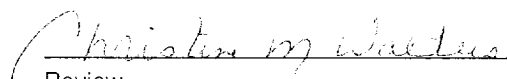
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	1.9	0.1
Total Petroleum Hydrocarbons	1.9	0.1

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **A.P.A. Woosley, Hospah. 5 Pt.; W Produced Water Pit.**


Analyst


Review

District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Operator: NERDLINC COMPANY INC. NMOCO Telephone: 505-334-6178
Address: 1000 Rio BRAZOS Rd AZTEC, NM 87410
Facility or: MARCELINA Well No. 1
Well Name
Location: Unit or Qtr/Qtr Sec A Sec 24 T 16N R 10W County MCKINLEY
Pit Type: Separator Dehydrator Other Produced WATER
Land Type: BLM , State , Fee X, Other

Pit Location: Pit dimensions: length 20, width 30, depth 3'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 95'
Direction from reference: 85 Degrees East North X
of
X West South

Depth To Ground Water:

(Vertical distance from
contaminants to seasonal
high water elevation of
ground water)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 Points) 0

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or; less than
1000 feet from all other water sources)

Yes (20 points)
No (0 points) 0

Distance To Surface Water:

(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches)

Less than 200 feet (20 points)
200 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 01-15-01 Dated Completed: 03-15-01

Remediation Method: Excavation Approx. cubic yards
(Check all appropriate sections) Landfarmed Insitu Bioremediation
Other Sample & Close in Place

Remediation Location: Onsite Offsite N/A.
(ie. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Pit partially Filled w/ Blowsaw
Collect 5 pt. sample from bottom @ 4' Below surface @ 4 sides
and center

Ground Water Encountered: No X Yes Depth

Final Pit:
Closure Sampling:
(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location four side walls and center @
Bottom

Sample depth 4'

Sample date 01-15-01 Sample time 16:20

Sample Results

Benzene(ppm) .0088

Total BTEX(ppm) .0978

Field headspace(ppm) N.A.

TPH 1.9 ppm

Ground Water Sample: Yes No X (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 03-16-01

SIGNATURE Harlan M. Brown

PRINTED NAME Harlan M. Brown
AND TITLE Geologist / Hydrogeologist

CLIENT: APLus NMOC
Hardline

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

PIT NO: _____

C.O.C. NO: 8459

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 99042-002

PAGE No: _____ of _____

LOCATION: NAME: Marcelina WELL #: 1 PIT: Prod. Water

DATE STARTED: 01-15-01

QUAD/UNIT: A SEC: 24 TWP: 16N RNG: 10W BM: _____ CNTY: HKSTNM

DATE FINISHED: 03-16-01

QTR/FOOTAGE: _____

CONTRACTOR: Enviro tech

ENVIRONMENTAL
SPECIALIST: HMB

SOIL REMEDIATION: EXCAVATION APPROX. 0 FT. x _____ FT. x _____ FT. DEEP.

DISPOSAL FACILITY: N/A CUBIC YARDAGE: _____

LAND USE: RANGE LEASE: FEE

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 95 FEET WNW FROM WELLHEAD.

DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000

NMOC RANKING SCORE: 0 NMOC TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION: Pit surface to $\pm 2'$ Full of Blow Sand.
No EVIDENCE of staining, No Odor. Collect 5 point
sample @ $\pm 4'$ BNG from bottom at side walls and Center
Remove pipe, fence, and other Appurtenances.

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE

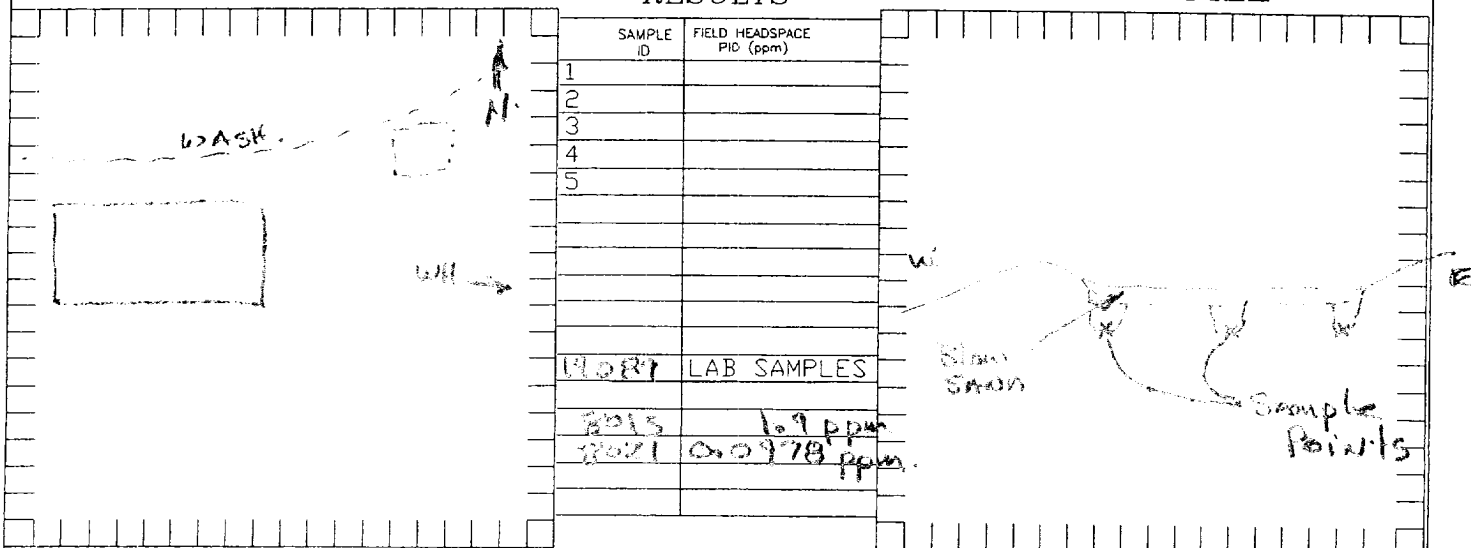


0 FEET

PIT PERIMETER

OVM
RESULTS

PIT PROFILE



TRAVEL NOTES:

CALLOUT: _____ ONSITE: _____

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	A Plus Well Service - NMOCD	Project #:	99042-002
Sample ID:	Marcelina No 1	Date Reported:	01-17-01
Laboratory Number:	19089	Date Sampled:	01-15-01
Chain of Custody:	8459	Date Received:	01-15-01
Sample Matrix:	Soil	Date Analyzed:	01-17-01
Preservative:	Cool	Date Extracted:	01-17-01
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	8.8	1.8
Toluene	18.2	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	52.2	2.2
o-Xylene	18.6	1.0
Total BTEX	97.8	

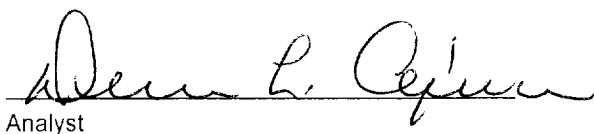
ND - Parameter not detected at the stated detection limit.

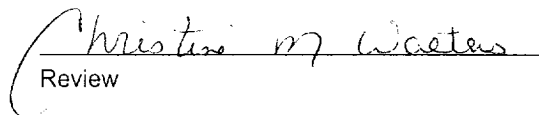
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	100 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: A.P.A. Woosley, Hospah. 5 Pt.; W Produced Water Pit.


Analyst


Review

CHAIN OF CUSTODY RECORD

08459

Client / Project Name				Project Location		ANALYSIS / PARAMETERS					
A Plus Well Service - NMOC				A.P.A. Woosley, Hospatt							
Sampler:				Client No.							
Harlan W. Brown				99042-002							
				904202							
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers						Remarks
SANTA FE LEGS #1	01.15.01	10:40	19082	Soil	1	✓					5 Pt.; Produced water Pit.
Nordlich Bullseye #10	01.15.04	12:35	19083	Soil	1	✓					5 Pt.; Reserve Pit.
Nordlich Bullseye #3	01.15	13:00	19084	Soil	1	✓					5 Pt.; East Pit @ Separator
Nordlich Bullseye #7	01.15	14:10	19085	Soil	1	✓					5 Pt.; Pit.
Nordlich Bullseye #8	01.15	14:30	19086	Soil	1	✓					5 Pt.; Pit.
Nordlich Bullseye #14	01.15	15:05	19087	Soil	1	✓					5 Pt.; Produced water Pit.
Marcelina N01	01.15	15:45	19088	Soil	1	✓					5 Pt.; Truss Pit w/ of w. l. l.
Marcelina N01	01.15	16:20	19089	Soil	1	✓					5 Pt.; W produced water Pit
Nordlich Bullseye 546	01.15	17:25	19090	Soil	1	✓					5 Pt.; Truss Pit.
Relinquished by: (Signature)				Date	Time	Received by: (Signature)		Date	Time		
Harlan W. Brown				01.15.01	20:15	P. C. Brown		1-15-01	20:15		
Relinquished by: (Signature)						Received by: (Signature)					
Relinquished by: (Signature)						Received by: (Signature)					

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt

Y	N	N/A
Received Intact	✓	
Cool - Ice/Blue Ice	✓	